A New Species of *Onagrandrena* Associated with *Camissonia campestris*

(Hymenoptera : Andrenidae)

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The following species of *Andrena* (*Onagrandrena*) is described at this time in order to make the name available for use in another study.

Andrena (Onagrandrena) camissoniae Linsley and MacSwain, new species

FEMALE.—Head and mesosoma dull black; metasoma shining black, posterior impressed tergal margins castaneous; pubescence pale ochraceous. *Head* with clypeus slightly shining, convex, densely punctate, without indication of a median longitudinal smooth line; labrum with process broad, about one-half length of first flagellar segment, as broad as long, distinctly elevated, apex subtruncate, broadly rounded at sides, without an apical notch; antennae with flagellum black, first segment, measured along anterior margin, as long as second and third combined. *Mesosoma* with mesoscutum dullish, finely and closely punctured, punctures subcontiguous, less than one diameter apart, interspaces finely almost coarsely reticulate; mesoscutellum and mesopleura more closely punctate than mesoscutum, punctures contiguous; propodeum coarsely subcontiguously, reticulate-punctate, basal enclosure finely, longitudinally, and only slightly obliquely rugose, with a single fine well defined straight median ridge; wings lightly tinted dark brown; legs with scopae of posterior tibiae long, one and one-half times width of tibiae, and moderately dense. *Metasoma* moderately slender, shining, second tergum with most anterior hairs long, minutely but distinctly plumose, surface finely punctate, most punctures separated by from three to five diameters, terga two to four with apical impression broad and distinct, finely, sparsely punctate, impunctate margin very narrow but distinct, shining. Body length approximatcly 11 mm, anterior wing 9 mm.

MALE.—Unknown.

Holotype female (California Academy of Sciences, Entomology), from 28 MILES NORTHWEST OF NEW CUYAMA, SANTA BARBARA COUNTY, CALIFORNIA, 8 June 1963, at flowers of *Oenothera dentata* (= *Camissonia campestris*) between 7:20 and 7:30 a.m. (G. I. Stage) and 3 paratypes (California Insect Survey, University of California, Berkeley) all from the same locality and flowers as follows: one between 6:50 and 7:00 a.m., one between 7:10 and 7:20 a.m., and one between 7:20 and 7:30 a.m.

This distinctive species is tentatively assigned to the *A.* (*O.*) *oenotherae* complex (Linsley and MacSwain, 1963) but differs from other

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known species not only in the ochraceous pubescence but the short, blunt labral process and the sculpturing of the propodeal enclosure.

Literature Cited

Linsley, E. G., and J. W. MacSwain. 1963. Descriptions of new species and subspecies of *Onagrandrena*, principally of the *Andrena oenotherae* complex (Hymenoptera : Andrenidae). Pan-Pacific Ent., 39: 189–198.

Cytology and bionomics of *Primicimex cavernis* Barber[1]

(Cimicidae : Hemiptera)

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Primicimex cavernis Barber is considered to be a primitive member of the Cimicidae and exhibits unique characters, such as the absence of a spermalege and the much larger size. The species has been reported only from bat caves in Texas and Guatemala. Practically no biology of this particular species is known, because of rareness and difficulty in keeping specimens alive in the laboratory. Furthermore, the population of Ney Cave in Texas may have been wiped out, since no collection has been made for the last 10 years although several careful surveys were conducted. More knowledge of this particular species is badly needed in order to understand the evolutionary relationships of the Cimicidae. I have been fortunate in finding new localities for the species and have succeeded in maintaining the bugs in the laboratory.

The purpose of this paper is to report some biological and cytological information concerning this unique species.

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Materials and Methods

The bugs used in this study were collected in the Cave of Janitzio Island, Mexico, and were maintained in the laboratory on *Tadarida brasiliensis mexicana* (Saussure). The laboratory colony has been

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